

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 9, 18, and 21.

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for servo track writing comprising:

coupling a reference disk and a copy disk to a chuck and a spindle motor of a servo track writer;

reading the servo information on the reference disk with a read head of the servo track writer; and,

writing said servo information onto a copy disk using a write head of said servo track writer before said copy disk is incorporated into a hard disk drive assembly;

removing the chuck, the reference disk and the copy disk from the spindle motor;

replacing the copy disk; and,

repeating the process of reading servo information from the reference disk and write the servo information on the copy disk.

2. (Original) The method of claim 1 wherein reading the reference disk comprises performing a track following operation, where said track following operation comprises:

positioning said read head at a first track on said reference disk;

following at least a portion of said first track with said read head, said reference disk to be rotated using a fluid dynamic bearing spindle;

determining a position error signal for said read head;

correcting a position of said read head using said position error signal; and,

reading servo information from at least said portion using said read head.

3. (Original) The method of claim 1 further comprising rotating said reference disk and said copy disk using a fluid dynamic bearing spindle.

4. (Original) The method of claim 1 wherein writing said servo information to the disk comprises writing a plurality of burst signals to the disk, said burst signals to be read by a drive head of said hard disk drive assembly to determine a position of said drive head.

5. (Original) The method of claim 1 wherein reading the reference disk comprises reading the reference disk with a read head of the servo track writer where said reference disk is encoded with a phase modulated servo pattern.

6. (Original) The method of claim 1 wherein reading the reference disk comprises reading the reference disk with a read head of the servo track writer where said servo information is recorded onto said reference disk using an offline servo track writer.

7. (Original) The method of claim 1 further comprising incorporating said copy disk into a disk stack of said hard disk drive assembly, copying at least a portion of said servo information onto a blank disk that is on said disk stack, and using said servo information to determine a position of a drive head of said hard disk drive assembly.

8. (Original) The method of claim 1 wherein writing said servo information onto said copy disk comprises writing said servo information onto said copy disk where said servo information and said disk copy are to be used in a dedicated servo system.

9. (Currently Amended) A servo track writer comprising:

an actuator having a plurality of actuator arms;

a read head connected to one of said actuator arms;

a write head connected to another of said actuator arms;

a spindle;

a chuck to secure a reference disk and a copy disk onto a spindle, said spindle to rotate said reference disk and said copy disk, said chuck being detachable from said spindle to replace said copy disk; and,

a controller to:

read servo information on the reference disk with said read head; and,

write said servo information onto said copy disk using said write head before incorporating said copy disk into a hard disk drive assembly.

10. (Original) The servo track writer of claim 9 wherein said controller further is to:

position said read head at a first track on said reference disk;

follow at least a portion of said first track with said read head;

determine a position error signal for said read head;

correct a position of said read head using said position error signal; and

read said servo information from at least said portion using said read head.

11. (Original) The servo track writer of claim 10 further comprising a plurality of copy disks and a plurality of write heads associated therewith.

12. (Original) The servo track writer of claim 10 wherein said servo information is to be stored in memory before being written to said copy disk.

13. (Original) The servo track writer of claim 9 wherein said spindle comprises a fluid dynamic bearing spindle.

14. (Original) The servo track writer of claim 9, wherein said reference disk is encoded with a phase modulated servo pattern.

15. (Original) The servo track writer of claim 9, wherein said servo information is recorded onto said reference disk using an offline servo track writer.

16. (Original) The servo track writer of claim 9 wherein said copy disk is to be incorporated into a disk stack of a hard disk drive assembly after said servo information has been written onto said copy disk, said servo information on said copy disk to be used to determine a position of a drive head in said hard disk drive assembly where said hard disk drive assembly utilizes a dedicated servo system.

17. (Original) The servo track writer of claim 9, wherein said copy disks are to be incorporated into a disk stack of a hard disk drive assembly after said servo information has been

written onto said copy disk, said servo information on said copy disk to be copied onto a blank disk in said hard disk drive assembly where said hard disk drive assembly utilizes an embedded sector servo system.

18. (Currently Amended) A servo track writer comprising:

an actuator having a plurality of actuator arms and heads attached thereto;

spindle means to rotate a reference disk and a copy disk, said reference disk to contain a plurality of tracks having servo information to be read by at least one of said heads;

means to secure and detach said reference disk and said copy disk to and from said spindle means;

means to perform a track following operation on said reference disk;

means to read said servo information from said reference disk and write said servo information onto said copy disk before said copy disk is incorporated into a hard disk drive assembly.

19. (Original) The servo track writer of claim 18 wherein said means to perform the track following operation comprises:

means for positioning a first head on a track on said reference disk;

means for following at least a portion of said track with said first head;

means for determining a position error signal for said first head;

means for correcting a position of said first head using said position error signal; and

means for reading said servo information from at least said portion with said first head.

20. (Original) The servo track writer of claim 18, further comprising means for incorporating said copy disk into said hard disk drive assembly, said copy disk to contain said servo information copied from said reference disk.

21. (Currently Amended) A servo track writer comprising:

an actuator having a plurality of actuator arms;

a read head connected to one of said actuator arms;

a write head connected to another of said actuator arms; and,

a fluid dynamic bearing spindle, said fluid dynamic bearing spindle to rotate a reference disk and a copy disk in a servo track writing operation;[.]

a spindle:

a chuck to secure the reference disk and the servo-copy disk to said fluid dynamic bearing spindle, said chuck being detachable from said spindle to replace said copy disk;[.]

a controller to:

perform a track following operation to read servo information on said reference disk; and,

write said servo information onto said copy disk using said write head before incorporating said copy disk into a hard disk drive assembly.

22. (Original) The servo track writer of claim 21 wherein said track following operation comprises:

positioning said read head at a first track on said reference disk;

following at least a portion of said first track with said read head;

determining a position error signal for said read head;

correcting a position of said read head using said position error signal; and

reading said servo information from at least said portion using said read head.

23. (Original) The servo track writer of claim 21 further comprising a plurality of copy disks each having a head associated therewith capable of writing information to said copy disks.

24. (Original) The servo track writer of claim 21 wherein said copy disk is to be incorporated into a disk stack of a hard disk drive assembly after said servo information has been written onto said copy disk, said servo information on said copy disk to be used to determine a position of a drive head of said hard disk drive assembly where said hard disk drive assembly utilizes a dedicated servo system.

25. (Original) The servo track writer of claim 21, wherein said copy disks are to be incorporated into a disk stack of a hard disk drive assembly after said servo information has been written onto said copy disk, said servo information on said copy disk to be copied onto a blank disk in said hard disk drive assembly where said hard disk drive assembly utilizes an embedded sector servo system.

26. (Original) The servo track writer of claim 21, wherein said fluid dynamic bearing spindle is an oil bearing spindle.